

Application No. 10/518,848  
Am dt. Dated: June 20, 2007  
Reply to Office Action Dated: March 29, 2007

## **REMARKS/ARGUMENTS**

The Examiner is thanked for the Office Action mailed March 29, 2007. The status of the application is as follows:

- Claims 4-9 are objected to for informalities.
- Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph.
- Claim 9 is rejected for depending on a rejected base claim.
- Claims 1-8 stand rejected under 35 U.S.C. 102(b) as being anticipated by Komardin (WO 98/49939).

The objections and rejections are discussed below.

### **The Objection to the Claims**

Claims 4-9 stand objected to for minor informalities. In particular, the Office has objected to the phrase “the object (13) to be examined” in the claims 4, 5, 6, 8, and 9 due to lack of antecedent basis. Claim 7 has been objected to by virtue of its dependency from claim 6. The subject claims have been amended herein to cure the noted lack of antecedent basis informalities. Accordingly, this objection should be withdrawn.

### **The Rejection under 35 U.S.C. 112, Second Paragraph**

Claims 1-9 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office has rejected claims 1, 5, and 9 for including the phrase “can be,” which the Office deems indefinite in that it is unclear as to whether or not the limitations following the phrase are required or not in the claims. Claims 2-4 and 6-8 have been objected to by virtue of their dependence from claim 1. Claims 1, 5, and 9 have been amended to overcome this rejection. More particularly, the phrase “can be” has been replaced with the term “is.” Accordingly, the rejection of claims 1-9 should be withdrawn.

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**The Rejection of Claim 9.**

The Examiner is thanked for indicating that claim 9 would be allowable if recast in independent form, the objection thereto is cured, and the 35 U.S.C. 112, second paragraph rejection thereto is overcome. Accordingly, claim 9 has been recast, in view of the objection and 35 U.S.C. 112, second paragraph rejection, in independent form as claim 10. No new matter has been added. Allowance of claim 10 is respectfully requested.

**The Rejection of Claims 1-8 under 35 U.S.C. 102(b)**

Claims 1-8 stand rejected under 35 U.S.C. 102(b) as being anticipated by Komardin (WO 98/49939). However, Komardin does not teach each and every element as set forth in the subject claims and, therefore, does not anticipate claims 1-8.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

MPEP §2131.

Amended independent **claim 1** is directed towards a computed tomography apparatus that includes a radiation source, a detector arrangement, and a device with which transmission radiation having traversed an examination zone is attenuated such that its intensity incident on the detector arrangement does not significantly exceed the intensity of radiation scattered in the examination zone and incident on the detector arrangement. The Office Action asserts Komardin teaches these claimed aspects at page 11, lines 8-13, page 12, lines 5-12, and page 13, lines 9-15. However, these sections of Komardin do not teach the claimed aspects.

More particularly, Komardin is directed towards an apparatus for analyzing substances within breast tissue. Page 11, lines 8-13, discloses a processing unit with tomography software that forms a three-dimensional scatter image from scatter radiation from a plurality of beams incident on the breast at different angles. Page 13, lines 9-15, discloses a frame for use in a mammography apparatus. The frame includes a breast

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positioning area, a radiation source, a beam forming apparatus, a source collimator, a filter, and a detector. Page 13, lines 9-15, discloses that the filter screens transmission radiation so that **only scattered radiation is received by the detector.** Hence, the filter filters transmission radiation such that no transmission radiation is received by the detector. However, claim 1 requires attenuated transmission radiation with an intensity that does not significantly exceed the intensity of scattered radiation. Therefore, Komardin does not teach each and every aspect as set forth in claim 1, and this rejection should be withdrawn.

Amended **claim 4**, which depends from claim 1, recites that the device includes a first collimator that is arranged on the radiation source, the radiation source or the first collimator being arranged so as to be offset relative to one another in a direction perpendicular to a propagation direction of the radiation beam in such a manner that the transmission radiation having traversed an object to be examined in the examination zone is not incident to a significant extent on the detector arrangement. The Office Action references page 11, lines 8-13, page 12, lines 5-12, and page 13, lines 9-15, of Komardin to teach these claimed aspects. As noted above, these sections of Komardin teach completely filtering the transmission radiation from the radiation beam striking the detector. However, claim 4 requires arranging the radiation source and the source collimator with respect to each other to direct transmission radiation so that it is not incident to a significant extent on the detector. Thus, Komardin does not teach claim 4, and this rejection should be withdrawn.

Amended **claim 5**, which depends from claim 4, recites that a first drive unit displaces the radiation source or the first collimator relative to one another in such a manner that only scattered radiation emanating from the object to be examined in the examination zone at different angles is detected. The Office Action references page 15, line 20 to page 16, line 5 of Komardin to teach these claimed aspects. However, this section of Komardin teaches using a moveable slotted aperture to set the width of the beam incident on the detector. For instance, Komardin discloses that the aperture can be moved to create beam widths of 20-120 microns, 40-80 microns, and 55-65 microns. Nowhere in this referenced section does Komardin teach or suggest displacing a radiation

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source or a collimator relative to one another so that only scattered radiation is detected. Accordingly, this rejection should be withdrawn.

Amended **claim 6**, which depends from claim 1, recites using a region of a collimator, which is located between the examination zone and the detector, to partly stop transmission radiation. The Office Action references page 13, lines 1-15 of Komardin to teach these claimed aspects. However, this section of Komardin discloses that a filter 26 filters the radiation so that **only scatter radiation** is received at the detector; thus, the filter 26 must filter out all of the transmission radiation. Therefore, the rejection of claim 6 should be withdrawn.

Amended **claim 7**, which depends from claim 6, recites that the region of the collimator used to partly stop transmission radiation (which is located between the examination zone and the detector per claim 6) is provided with an opening wherethrough a part of the transmission radiation incident on the region reaches the detector arrangement. The Office Action references Fig. 2 and page 17, line 23 to page 18, line 1 of Komardin to teach these claimed aspects. However, Fig. 2 and this section of Komardin do not contemplate providing such an opening in the filter 26. In addition, the beam forming apparatus 77 is located between the source (not the detector) and the examination zone. Moreover, due to the location of the apparatus 77, it cannot partly stop transmission radiation that has traversed the examination zone. Accordingly, the rejection of claim 7 should be withdrawn.

Amended **claim 8**, which depends from claim 1, recites the device is formed by a detector arrangement which is positioned so as to be shifted in a direction perpendicular to a propagation direction of the radiation beam in such a manner that the radiation having traversed the object to be examined is directed at least substantially so that the transmission radiation bypasses the detector arrangement. The Office Action references Fig. 2 and page 17, line 23 to page 18, line 1 of Komardin to teach these claimed aspects. However, Fig. 2 and this section of Komardin are silent regarding shifting a detector arrangement as such. In addition, Fig. 2 and this section of Komardin are silent regarding directing a radiation beam so that transmission radiation bypasses the detector arrangement. Therefore, this rejection should be withdrawn.

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**Claims 2 and 3** depend from independent claim 1 and, by virtue of their dependencies, are allowable for at least the reasons discussed above.

**Newly Added Claims 10-20.**

As discussed above, **claim 10** is drawn to subject matter deemed allowable by the Examiner. In particular, claim 10 includes the subject matter of claims 1 and 9 as originally filed, with the exception of removing references indicia (numerals and symbols) in order to place the claims in a format suitable for prosecution before the Office. Claim 10 has not been amended to address an issue of patentability.

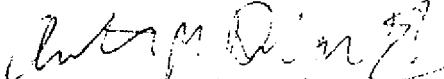
**Claims 11-20** have been added to further emphasize various claimed aspects. No new matter has been added. Entry and allowance of these claims is kindly requested.

**Conclusion**

In view of the foregoing, it is submitted that the claims distinguish patentably and non-obviously over the prior art of record. An early indication of allowability is earnestly solicited.

Respectfully submitted,

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